M3T-F160-80NRA

Converter Board for Connecting FLX160 to 80-pin 0.8-mm-pitch QFP/LQFP

User's Manual

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1. Outline

The M3T-F160-80NRA is a converter board for connecting the 160-core flexible cable FLX160 to a foot pattern for 80-pin 0.8-mm-pitch QFP (80P6N-A) and LQFP (80P6U-A).

2. Package Components (See Figure 1)

(1) M3T-F160-80NRA converter board..... 1 pc.
(2) NQPACK080RA (made by Tokyo Eletech Corporation)..... 1 pc.
(3) YQPACK080RA (made by Tokyo Eletech Corporation)..... 1 pc.
(4) YQSOCKET080RAF (made by Tokyo Eletech Corporation)..... 1 pc.
Pre-mounted on the converter board M3T-F160-80NRA
(5) YQ-GUIDE's (made by Tokyo Eletech Corporation) .....4 pcs.
(6) M3T-F160-80NRA User's Manual (This manual)

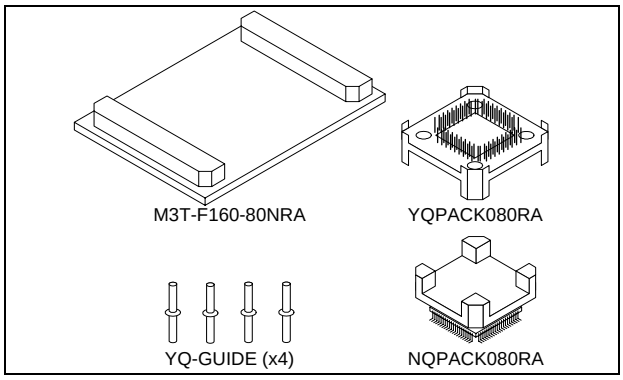

Figure 1 Package components of the M3T-F160-80NRA

3. Specifications

Table 1 Specifications

Applicable package	80P6N-A, 80P6U-A (80-pin 0.8-mm-pitch QFP/LQFP)
Insertion/removal iterations of connector	50 times guaranteed

4. Usage (See Figure 2)

The M3T-F160-80NRA can be used for debugging and board-mounted evaluation in common by mounting the NQPACK080RA on the user system.

(1) For debugging
Mount the NQPACK080RA on the foot pattern of the user system and attach the YQPACK080RA on it. And connect the probe of the emulation pod to the upper connector of the M3T-F160-80NRA. Then connect the YQPACK080RA and the M3T-F160-80NRA.

(2) For onboard evaluation
Mount an MCU with on-chip flash memory or one-time PROM and the HQPACK080RA168 (separately available) or HQPACK080RA160 (separately available) in that order on the NQPACK080RA on the user system.

Before using the M3T-F160-80NRA, be sure to read "6. Precautions" on page 3.

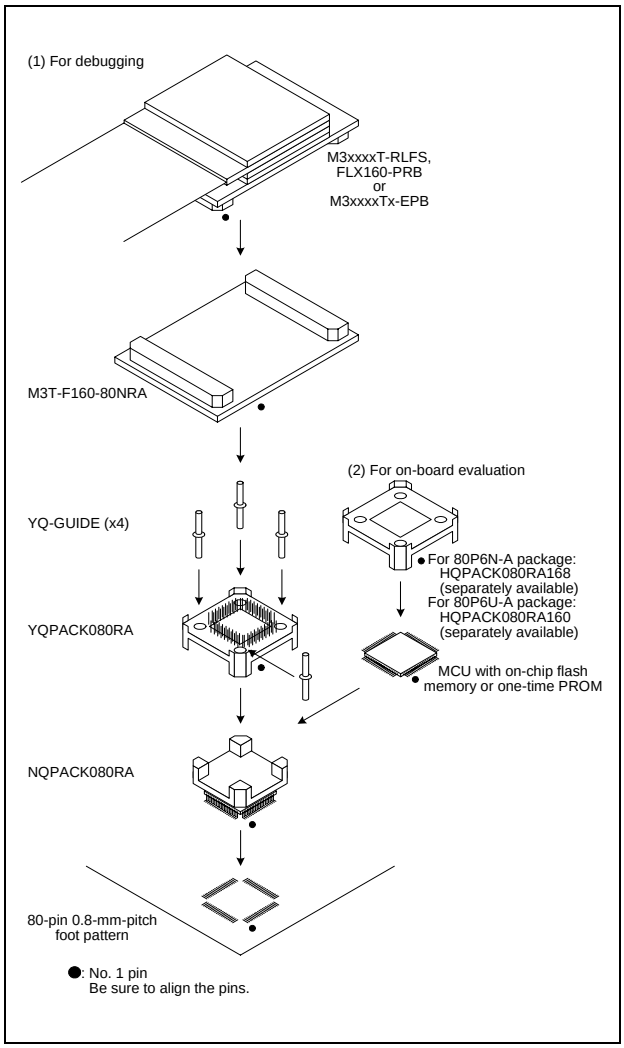

Figure 2 Usage of the M3T-F160-80NRA

5. External Dimensions and a Sample Foot Pattern

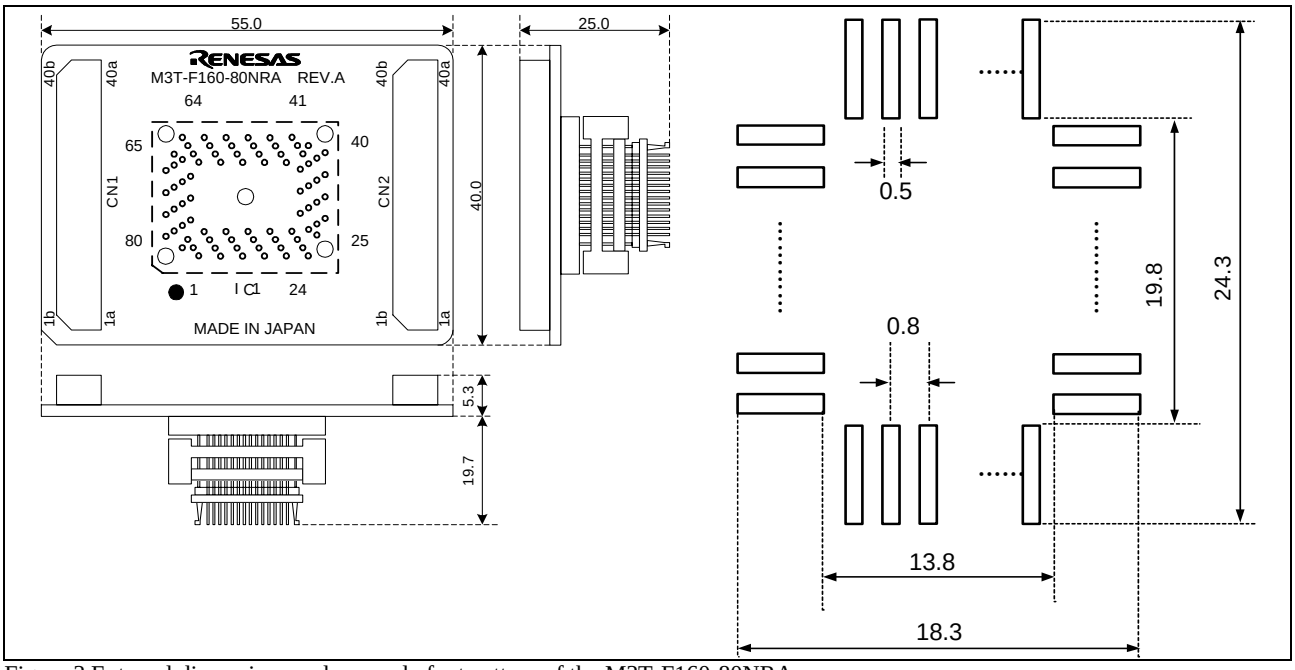

Figure 3 External dimensions and a sample foot pattern of the M3T-F160-80NRA

6. Precautions

⚠ CAUTION

Caution to Be Taken for This Product:

- When connecting the YQPACK080RA, be sure to use the included YQ-GUIDE's.
- Do NOT use the screws included with the YQPACK080RA for connecting the YQPACK080RA.

IMPORTANT

Notes on This Product:

- We cannot accept any request for repair.
- For purchasing the NQPACK080RA, YQPACK080RA, HQPACK080RA168 and HQPACK080RA160, contact the following:

  Tokyo Eletech Corporation http://www.tetc.co.jp/e_tet.htm

  ~~Daimaru Kogyo Ltd.~~ ~~http://www.daimarukogyo.co.jp/~~
- For inquiries about the product or the contents of this manual, contact your local distributor.

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7. Correspondence of Connectors CN1 and CN2

Table 2 Correspondence of the connectors

CN1	IC1	CN1	IC1	CN2	IC1	CN2	IC1
1a	-	1b	8	1a	-	1b	9
2a	7	2b	6	2a	10	2b	11
3a	5	3b	-	3a	12	3b	13
4a	-	4b	-	4a	14	4b	15
5a	-	5b	-	5a	16	5b	17
6a	-	6b	-	6a	18	6b	19
7a	4	7b	3	7a	20	7b	21
8a	2	8b	1	8a	22	8b	23
9a	-	9b	-	9a	24	9b	-
10a	-	10b	-	10a	-	10b	-
11a	-	11b	-	11a	-	11b	-
12a	-	12b	80	12a	-	12b	-
13a	79	13b	78	13a	-	13b	-
14a	77	14b	76	14a	25	14b	26
15a	75	15b	74	15a	27	15b	28
16a	73	16b	72	16a	29	16b	30
17a	71	17b	-	17a	-	17b	-
18a	-	18b	-	18a	-	18b	-
19a	-	19b	-	19a	31	19b	32
20a	-	20b	-	20a	33	20b	-
21a	-	21b	-	21a	-	21b	34
22a	-	22b	-	22a	-	22b	-
23a	-	23b	70	23a	-	23b	-
24a	69	24b	68	24a	-	24b	-
25a	67	25b	-	25a	35	25b	36
26a	-	26b	-	26a	37	26b	38
27a	-	27b	-	27a	-	27b	-
28a	66	28b	65	28a	-	28b	39
29a	-	29b	-	29a	40	29b	-
30a	-	30b	-	30a	-	30b	-
31a	-	31b	-	31a	-	31b	-
32a	-	32b	64	32a	-	32b	-
33a	63	33b	62	33a	-	33b	-
34a	61	34b	60	34a	41	34b	42
35a	59	35b	58	35a	43	35b	44
36a	57	36b	56	36a	45	36b	46
37a	55	37b	54	37a	47	37b	48
38a	53	38b	52	38a	-	38b	-
39a	51	39b	50	39a	-	39b	-
40a	49	40b	-	40a	-	40b	-

("-": No connection)